

Work Order ID 133781

Wednesday, June 17, 2015 2:51:26 PM

133781**U/R**

Page 1

Item ID: D119-646-041

Accept

N900040100

Setup Start

NS1

Revision ID: U/R - URF15-560

Stop

NS2

Item Name: Replacement Skidtube with Wearpads, Fits LH or RH

Start Date: 6/17/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/17/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLS Date: JUN 17 2015

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D3887-041

D

IIN-D119-646

C

100

0.00

100

DC

0.00

Doc.Control -USB or Paperwork

Memo

Photocopy bluefile & type labels per PPP D119-646-041

CHG003

N/A MLS JUL 06 2015

110

0.00

110

Skidtubes

0.00

Skidtubes

Memo

1- inspect Mat'L D2500-1-190 for damage

2-Cut tube to length as per dwg D3887 (154.8")

3- Ensure squareness of ends and scribe batch#

15-6-22 

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Work Order ID 133781***133781***

Page 2

Wednesday, June 17, 2015 2:51:26 PM

Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Chemical Conversion Coat per QSI005 4.1	0.00							
120									
HandFinish	Memo	0.00							
Hand Finishing									
121	QC7-Inspect Chemical Conversion Coat	0.00							
121									
QC	Memo	0.00							
Quality Control									
122	QC5- Inspect part completeness to step on W/O	0.00							
122									
QC	Memo	0.00							
Quality Control									

**DAS
18
9-00****DAS
18
9-00**

DQA: _____ Date: _____



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Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130		0.00							
Skidtubes	Memo								
Skidtubes	1- Install drill Jig DT9477 drill X-bolt spacer pilot holes using 3/16" drill first side only.								
	2- 2nd side, locating from first saddle holes use DT9861 A/B to drill 2nd side fwd saddle holes.								
	3- 2nd side locating from fwd saddle drill remaining crossbolt spacer holes using DT9477								
	4- Open crossbolt spacer holes to finished size as per dwg D3887 (section D-D and E-E) ***DO NOT OPEN FWD Saddles Holes***								
	5- Deburr, blow out chips from inside of tube.								
	6- Bond web in place as per Dwg D3887 & QSI 015. A/R Sikaflex-291 <u>132392</u> Sikaflex expire date: <u>16-2-12</u> Start: _____ Time: _____ Finish: _____ Time: _____ ***** (Adhere for 12 hours) *****								

Handwritten notes:
DOL 15-6-23
DOL 15-6-23

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

Work Order ID 133781***133781***

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Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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135

QC5- Inspect part completeness to step on W/O

0.00

135

QC

Memo

0.00

Quality Control

**DAS
18
9-89**1 0 15-06-24

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause <table style="width:100%; border: none;"> <tr> <td style="width:50%;"> Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="width:50%;"> No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ </td> </tr> </table>		Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="width:33%;"> Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ </td> <td style="width:33%;"> Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td style="width:33%;"> Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ </td> <td style="width:33%;"> Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐ </td> </tr> </table>						Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐												
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐																								
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OTHER : _____																									

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133781

Page 5

Item ID: D119-646-041

Accept

N900040100

Setup Start

NS1

Revision ID: U/R - URF15-560

Item Name: Replacement Skidtube with Wearpads, Fits LH or RH

Stop

NS2Start Date: 6/17/2015 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 6/17/2015 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140		0.00							
140									
Skidtubes									
Skidtubes	Memo 1- Bend FWD end of tube using bender 1 and bend prog. D3887.***Must use bending aid DT9544, ensure proper positioning*** 2- Cut FWD end of tube as per dwg D3887.***Verify measurment*** 3- Buff out marks left from bending 4- Drill FWD cap holes using DT8215. Open FWD & AFT cap holes to 0.208" 5- Open FWD saddle holes to finished size as per dwg D3887 6- Drill FWD x-bolt spacer holes using DT9816 and open to finished size.(verify measurement) 7- Drill Tow ring hole, using DT10047 locate from FWD saddle hole. (verify neasurement). Open to finished size. 8- Drill 1.87" and 3.74 holes using DT10045 A&B locate from FWD saddle hole. (verify measurement) as per dwg. 9- C'sink FWD cap hole as per detail "C" 10- Drill holes for wearpads using DT8931, open to 0.297". 11- Countersink crossbolt spacer holes, and prepare tube for welding/deburr. 12- Deburr and blow out chips from inside of tube.	0.00							

*JH DGL 15-6-24**15-6-24 JH*

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Page 6

Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--

150

QC

Memo

0.00

Quality Control

DAS
18
9-891 0 15-06-24

Work Order ID 133781

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Page 7

Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

0.00

160

Skidtubes

Skidtubes

Memo

0.00

NOTE: TACK IN 2 MOST FWD X-BOLT SPACERS AND TEST FIT FWD
GROUND HANDLING FIXTURE, IF FIXTURE FITS WELL THEN
PROCEED. FIXTURE DT10091.

1-Insert crossbolt spacers. Weld as per QSI 004 and Dwg D3887. Remember to
back drill each hole before welding the other side. Use aluminum rod
A/R Aluminum Rod M131562

2-Grind cross bolt welds flush as per Dwg D3887. Ensure no pin hole.

3-Counterbore 5/16" x 0.750" deep as per Dwg D3887.

4- Deburr & Scribe batch # on Aft end of tube.

*BE15-06-25**BE15-06-25**DOL 15-6-25*

170

QC5- Inspect part completeness to step on W/O 0.00

170

QC

Quality Control

Memo

0.00

TEST FIT USING FIXTURE DT10091.

DAS
38

JUN 26 2015

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Page 8

Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 *180* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00				1			DAS 38 9-89 JUN 26 2015
190 *190* HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.	0.00 0.00				1	15-6-29		JH
200 *200* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo START TIME: 8:55 OVEN TEMPERATURE: 320° FINISH TIME: 9:25 SEE Attached	0.00 0.00				1	15-6-30		DAS 34 9-89 P.T.O.

Work Order ID 133781

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Page 9

Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC3- Inspect Part Finish	0.00							
210									
QC	Memo	0.00							
Quality Control									
220		0.00							
220									
HandFinish	Memo	0.00							
Hand Finishing	1-Install inserts as per Dwg D3887.								
230	QC5- Inspect part completeness to step on W/O	0.00							
230									
QC	Memo	0.00							
Quality Control									

DAS
15
9-89DAS
34
9-89

Work Order ID 133781

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Page 10

Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240		0.00							
240									
HandFinish									
Hand Finishing	★ SEP Attached Memo 1-Install wearpads, gaskets as per Dwg D3887. Put sikaflex in insert before installing bolts and washers A/R Sikaflex-240/-291 <u>M132382</u> Sikaflex expire date: <u>16102</u> 2-assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: <u>M4B1349</u> 3 -Inspect for foreign objects as per QSI 024 <u>RTU 598 M132017 exp 15/06</u> 4 -Install Aft Cap and seal with Sikaflex. Clean excess adhesive. A/R Sikaflex-240/-291 <u>M132382</u> Sikaflex expire date: <u>16102</u>	0.00							
245	QC5- Inspect part completeness to step on W/O	0.00							
245									
QC									
Quality Control	Memo	0.00							

P.T.O.DAS
38
9-89

JUL 02 2015

Work Order ID 133781

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Page 11

Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250 *250* HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <u>M11325990</u> Memo	0.00				1x	4	15/06/28	
251 *251* QC Quality Control	QC3- Inspect Part Finish Memo	0.00				1			DAS 38 9-89 JUL 02 2015
260 *260* Packaging Packaging	Identify as per dwg & Stock Location: <u>PPP</u> <u>133769</u> Memo	0.00				1		7-6	

Work Order ID 133781

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Page 12

Item ID: D119-646-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: U/R - URF15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Wearpads, Fits LH or RH
Start Date: 6/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/17/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	QC21 - Final Inspection - Work Order Release	0.00							
270									
QC	Memo	0.00							
Quality Control									

ML5 JUL 06 2015

DS76

Picklist Print

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Page 1

Work Order ID: 133781

133781

Parent Item: D119-646-041

D119-646-041

Parent Item Name: Replacement Skidtube with Wearpads, Fits LH or RH

Start Date: 6/17/2015

Required Date: 6/17/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC
10.02.22 per PAR 09-043 EC verified by:DD IPP rev B
(DEOD3887-B-1)(ecn 12-675) DD verf:JLM IPP REV:D 13.03.20 per
chg003 ECN13-534 DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-190		Manufactured	No			110	Each	46.0000	1	1			
D2500-1-190									**				
Ext'n -I' Beam Tube 4"													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				LG002		46							
				120085		46							
D2579		Manufactured	No			140	Each	173.0000	2	2			
D2579									**				
Crossbolt Spacer													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				LG001		173							
				113785		24							
				123997		149							
D2855-3		Manufactured	No			240	Each	38.0000	2	2			
D2855-3									**				
Cap													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FP001		38							
				111898		10							
				127596		28							

15-6-22

06/15/06/24

15/06/30

X2

Picklist Print

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Page 2

Work Order ID: 133781

133781

Parent Item: D119-646-041

D119-646-041

Parent Item Name: Replacement Skidtube with Wearpads, Fits LH or RH

Start Date: 6/17/2015

Required Date: 6/17/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1611-005

Purchased

No

240

Each

282.0000

16

16

NAS1611-005

O-RING

**

HL 15/06/30

Location

Loc Qty

Loc Code

FP001

282

m129198

75

m129384

207

D3492-5

Manufactured

No

240

Each

39.0000

16

16

D3492-5

Plug

**

HL 15/06/30

Location

Loc Qty

Loc Code

FP001

39

120153

39

D3672-1

Manufactured

No

240

Each

538.0000

2

2

D3672-1

Washer, Phenolic

**

HL 15/06/30

Location

Loc Qty

Loc Code

FG

10

85222

10

FP001

170

113581

170

ST055

358

120116

3

127322

355

X 2

Picklist Print

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Page 3

Work Order ID: 133781

133781

Parent Item: D119-646-041

D119-646-041

Parent Item Name: Replacement Skidtube with Wearpads, Fits LH or RH

Start Date: 6/17/2015

Required Date: 6/17/2015

Start Qty: 1.00

Required Qty: 1.00

D3681-1

Manufactured No

160

Each

64.0000

8

8

D3681-1

Spacer

**

BE 15-06-24

Location

Loc Qty

Loc Code

LG

60

133174

60

LG001

4

132711

4

D3847-1

Manufactured No

240

Each

12.0000

5

5

D3847-1

Wearpad

**

HL 15/06/30

Location

Loc Qty

Loc Code

FP001

12

112444

10

113736

2

D3847-11

Manufactured No

240

Each

14.0000

1

1

D3847-11

Wearpad

**

HL 15/06/30

Location

Loc Qty

Loc Code

FP001

14

112558

8

113833

6

D3885-1

Manufactured No

140

Each

3.0000

1

1

D3885-1

Standard Web

**

119039 *1 DGL
15-6-23

Location

Loc Qty

Loc Code

LG002

3

129069

3

Picklist Print

Wednesday, June 17, 2015 2:51:30 PM

Page 4

Work Order ID: 133781

133781

Parent Item: D119-646-041

D119-646-041

Parent Item Name: Replacement Skidtube with Wearpads, Fits LH or RH

Start Date: 6/17/2015

Required Date: 6/17/2015

Start Qty: 1.00

Required Qty: 1.00

D3903-1

Manufactured No

160

Each

78.0000

12 12

D3903-1

Spacer

**

BK 15-06-24

Location

Loc Qty

Loc Code

LG

23

132881

23

LG001

55

124312

3

133139

52

12

ALS4-1032-130

AELS4-1032-130

Purchased

No

220

Each

2,564.000

30

30

ALS4-1032-130

Rivnut

**

ell 15/06/30

Location

Loc Qty

Loc Code

st549

2564

M132317

2564

X30

AN3C5A

Purchased

No

240

Each

296.0000

32

32

AN3C5A

Bolt

**

ell 15/06/30

Location

Loc Qty

Loc Code

FG

5

122800

5

FP001

6

M131420

6

ST

56

121708

56

ST338a

220

M130851

16

M131803

204

ST350

9

X32

M131320

9

*★
SEE Attached*

Wednesday, June 17, 2015 2:51:30 PM

Shop Packet Print

Page 4

Picklist Print

Wednesday, June 17, 2015 2:51:30 PM

Page 5

Work Order ID: 133781

133781

Parent Item: D119-646-041

D119-646-041

Parent Item Name: Replacement Skidtube with Wearpads, Fits LH or RH

Start Date: 6/17/2015

Required Date: 6/17/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

Each

5,840.000

32

NAS1149C0332R

**

WASHER

ll 12/06/30

Location

Loc Qty

Loc Code

FP001

2140

m130325

2140

GA

318

m131618

318

ST271

3382

m132262

3382

X32

MS24694-C52

Purchased

No

Each

87.0000

2

MS24694-C52

**

SCREW

ll 12/06/30

Location

Loc Qty

Loc Code

FP001

41

m127059

41

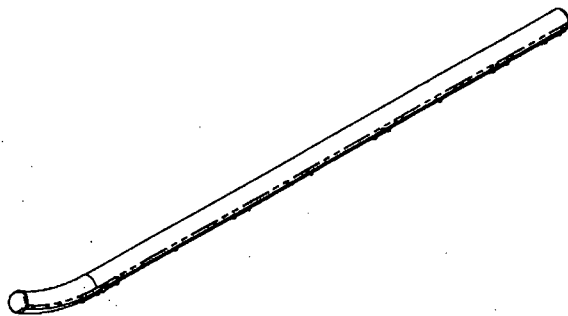
ST287

46

124308

46

X2



D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3887-043 STANDARD SKIDTUBE ASSY WITH WEARPLATE (SIMILAR)
D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-1 WEB
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3887-041 = 32.0 lbs
D3887-043 = 37.0 lbs
D3887-045 = 38.1 lbs
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) INSERT D3885-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
- 11) INSERT D3492-045 PLUG ASSY INTO Ø0.197 HOLES (BOTH SIDES OF TUBE)
- 12) USE DART DRILL TEMPLATE DT8931 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPLATE INSERTS. INSTALL AEL5-1032-130 INTO D3887-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/291.

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3887-041	STD SKIDTUBE ASSY WITH WEARPAD
2		X		D3887-043	STD SKIDTUBE ASSY WITH WEARPLATE
3			X	D3887-045	STD SKIDTUBE ASSY WITH TRAINING WEARPLATE
10	2	2	2	D2579	CROSS BOLT SPACER
11	2	2	2	D2855-3	CAP
12	16	16		D3492-045	PLUG ASSY
13	2	2	2	D3872-1	PHENOLIC WASHER
14	8	8	8	D3681-1	SPACER
17	5	5		D3847-1	WEARPAD
18	1	1		D3847-11	AFT WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-047	AFT WEARPLATE ASSY
22			1	D3849-041	FWD TRAINING WEARPLATE ASSY
23			1	D3849-043	AFT WEARPLATE ASSY
24	1	1	1	D3885-1	STANDARD WEB
25	1	1		D3887-11	STANDARD SKIDTUBE
26			1	D3887-13	STANDARD SKIDTUBE
27	12	12	12	D3903-1	SPACER
28			16	D3904-1	WASHER
41	30	30		AL34-1032-130	INSERT
42	32	32	2	AN3C5A	BOLT
43			8	AN3C48A	BOLT
44	32	32		NAS1149C0332R	WASHER (OR AN980C10L)
45			8	MS21043-3	NUT
46	2	2	2	MS24894-C52	SCREW

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NO. 133781.MCJ
1506-17

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2014 NOV 24
ECN 14-628

UNDER REVIEW

15.04.30 URF15-560 AP

D	REVISED BEND TOLERANCES FOR MANUFACTURABILITY, 135.07 WAS 134.04 (ZN D2-8), ADD 5.07 (ZN C2-4), ADD 116.8 (ZN D6-8), DELETE GASKETS (80M, SH2)	DB	13.09.20
C	(SH11, PL ZN C2-2, C3-2, C4-2) ITEM 13, QTY 2 WAS 4, ITEM 42, QTY 32 WAS 34, ITEM 44, QTY 30 WAS 32, ADD ITEM 46, MS24894-C52 WAS AN3C5A, 2 PLCS (ZN C1-5, C1-6, 84-7) 0.201 CSK Ø0.385 X 100, WAS Ø0.214 THRU, ADDED DETAIL F (ZN C8-5, C8-6, B8-7), ADD ITEM 10, D2579 CROSS BOLT SPACER (ZN D4-1, A8-7), AL34-1032-130 WAS AEL5-1032-130 (ZN C4-1, C5-7, C3-7); ADD DT8931 (ZN A8-1); ADD 134.04 (ZN C4-8); D2855-3 WAS D2575 (ZN D4-1, C7-2, C2-2, C7-3, C2-3, C7-4, C2-4); AN3C5A WAS AN3C4A (ZN C8-2, C2-2, C8-3, C2-3, C8-4, C2-4); Ø0.313 WAS Ø0.328 (ZN C4-5, C4-5, C2-7 & B3-7) REVISED NOTE N (ZN B3-7)	DB	13.02.19
B		RF	09.08.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA DRAWING NO. D3887 TITLE A119 STD SKIDTUBE ASSY SCALE NTS	
DRAWN	DB		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.09.20	SHEET 1 OF 8 REV. D	

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AN3C5A BOLT
D3872-1 PHENOLIC WASHER
NAS1149C0332R WASHER
(1 PER SIDE)

SEAL WITH
SIKAFLEX-241/291

D2855-3 CAP

D3847-11
WEARPAD

BLACK ANTI-SKID TO 0.5
ABOVE LOCATION RIDGE
TYP

11
Ø0.197
8 PL PER SIDE
REF

1.5

1.5

1.5

D2855-3 CAP

SEAL WITH
SIKAFLEX-241/291

MS24694-C52 SCREW
(1 PER SIDE)

D3847-1
WEARPAD
5 PL

AN3C5A BOLT
NAS1149C0332R WASHER
24 PL

PLUG UNUSED INSERTS WITH
AN3C5A-BOLT
NAS1149C0332R WASHER
6 PL

AN3C4A

15/6/10

D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD
(MAKE FROM D3887-11)

UNDER REVIEW

15.04.30 URF15-560 AP

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AN3C5A BOLT
D3672-1 PHENOLIC WASHER
NAS1149C0332R WASHER
(1 PER SIDE)

SEAL WITH
SIKAFLEX-241/291

D2855-3 CAP

D3847-11
WEARPAD

D3847-047
AFT WEARPLATE ASSY

AN3C5A BOLT
NAS1149C0332R WASHER
30 PL

D3847-045
CENTER WEARPLATE ASSY

D3847-043
FWD WEARPLATE ASSY

D3847-1
WEARPAD
5 PL

BLACK ANTI-SKID TO 0.5
ABOVE LOCATION RIDGE
TYP

11
Ø0.197
8 PL PER SIDE
REF

D2855-3 CAP

SEAL WITH
SIKAFLEX-241/291

MS24694-C52 SCREW
(1 PER SIDE)

D3887-043 STANDARD SKIDTUBE ASSY WITH WEARPLATE
(MAKE FROM D3887-11)

UNDER REVIEW

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AN3C5A BOLT
D3872-1 PHENOLIC WASHER
NAS1149C0332R WASHER
(1 PER SIDE)

SEAL WITH
SIKAFLEX-241/291

D2855-3 CAP

AN3C46A BOLT
D3904-1 WASHER, 2 PL
MS21043-3 NUT
8 PL

D3849-043
AFT TRAINING WEARPLATE ASSY

BLACK ANTI-SKID TO 0.5
ABOVE LOCATION RIDGE
TYP

1.5
1.5

2.00 DISTANCE TO D3885-1 WEB

1.5
1.5

D2855-3 CAP

SEAL WITH
SIKAFLEX-241/291

MS24694-C52 SCREW
(1 PER SIDE)

D3849-041
FWD TRAINING WEARPLATE ASSY

UNDER REVIEW

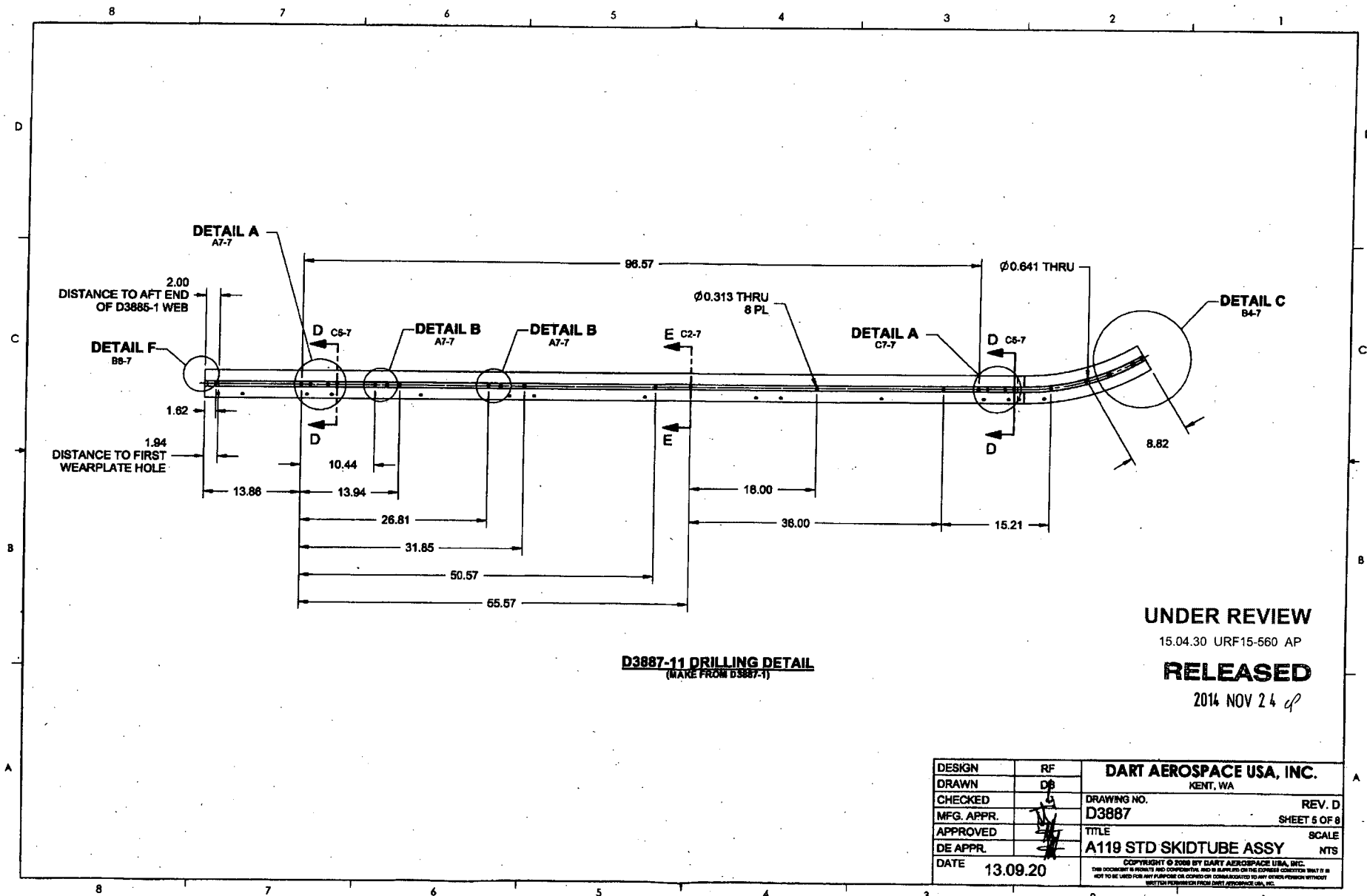
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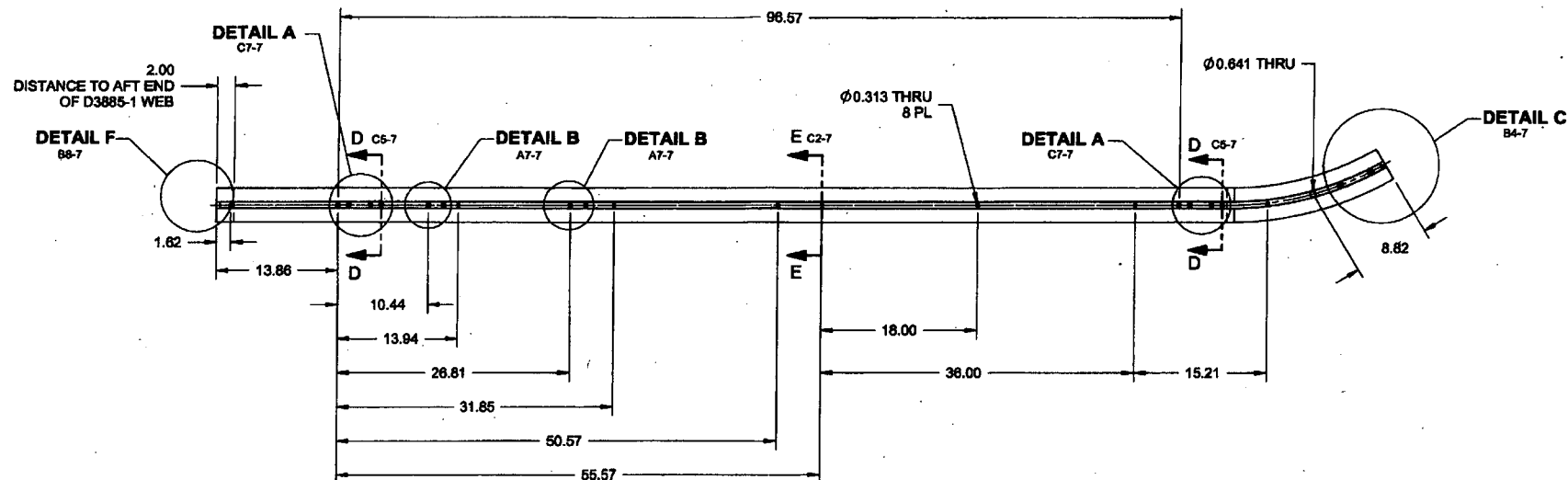
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2014 NOV 24 *CP*

D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE
(MAKE FROM D3387-13)

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MFG. APPR.	<i>[Signature]</i>	D3887	SHEET 4 OF 8
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D3887-13 DRILLING DETAIL
(MAKE FROM D3887-1)

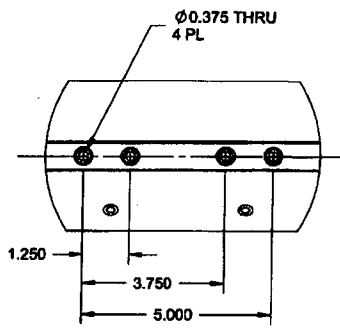
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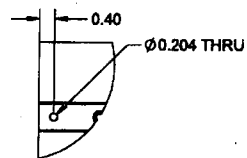
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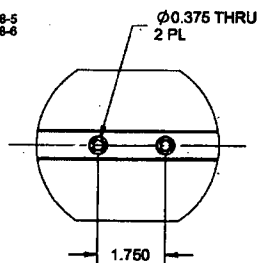
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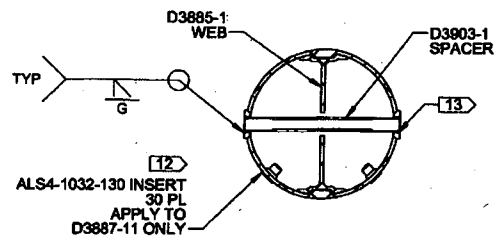
DETAIL A
SCALE 4X
D7-5
C3-5
D7-6
C3-6



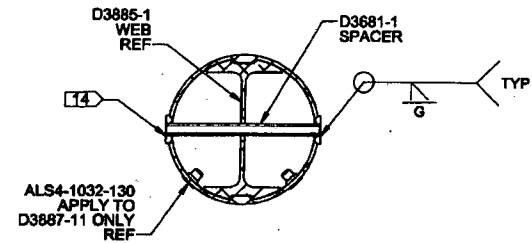
DETAIL F
SCALE 4X
C8-5
C8-6



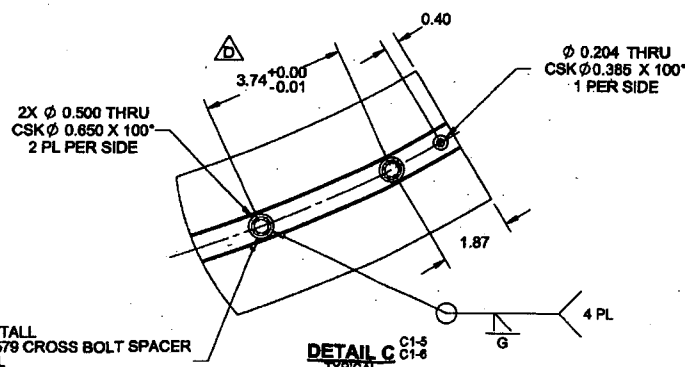
DETAIL B
SCALE 4X
C8-5
C5-5
C8-6
C5-6



SECTION D-D
SCALE 4X
(FOR 12 X Ø0.375 HOLES PER SKIDTUBE)
C7-5
C3-5
C7-6
C2-6



SECTION E-E
SCALE 4X
(FOR 8 X Ø0.313 HOLES PER SKIDTUBE)
C4-5
C4-6



DETAIL C
SCALE 4X
C1-5
C1-6

- NOTES:**
- 13) AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
- i) CHAMFER HOLES Ø0.475 x 45°
 - ii) INSERT D3903-1 SPACER
 - iii) WELD INTO PLACE AND GRIND FLUSH
 - iv) CBORE TO 0.313 x 0.75 DEEP
 - v) DEBURR HOLES
- 14) AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.313 HOLES ONLY:
- vi) CHAMFER HOLES Ø0.364 x 45° OR 0.050 DEEP x 45° (BOTH SIDES)
 - vii) INSERT D3681-1 SPACER
 - viii) WELD INTO PLACE AND GRIND FLUSH
 - ix) DEBURR HOLES

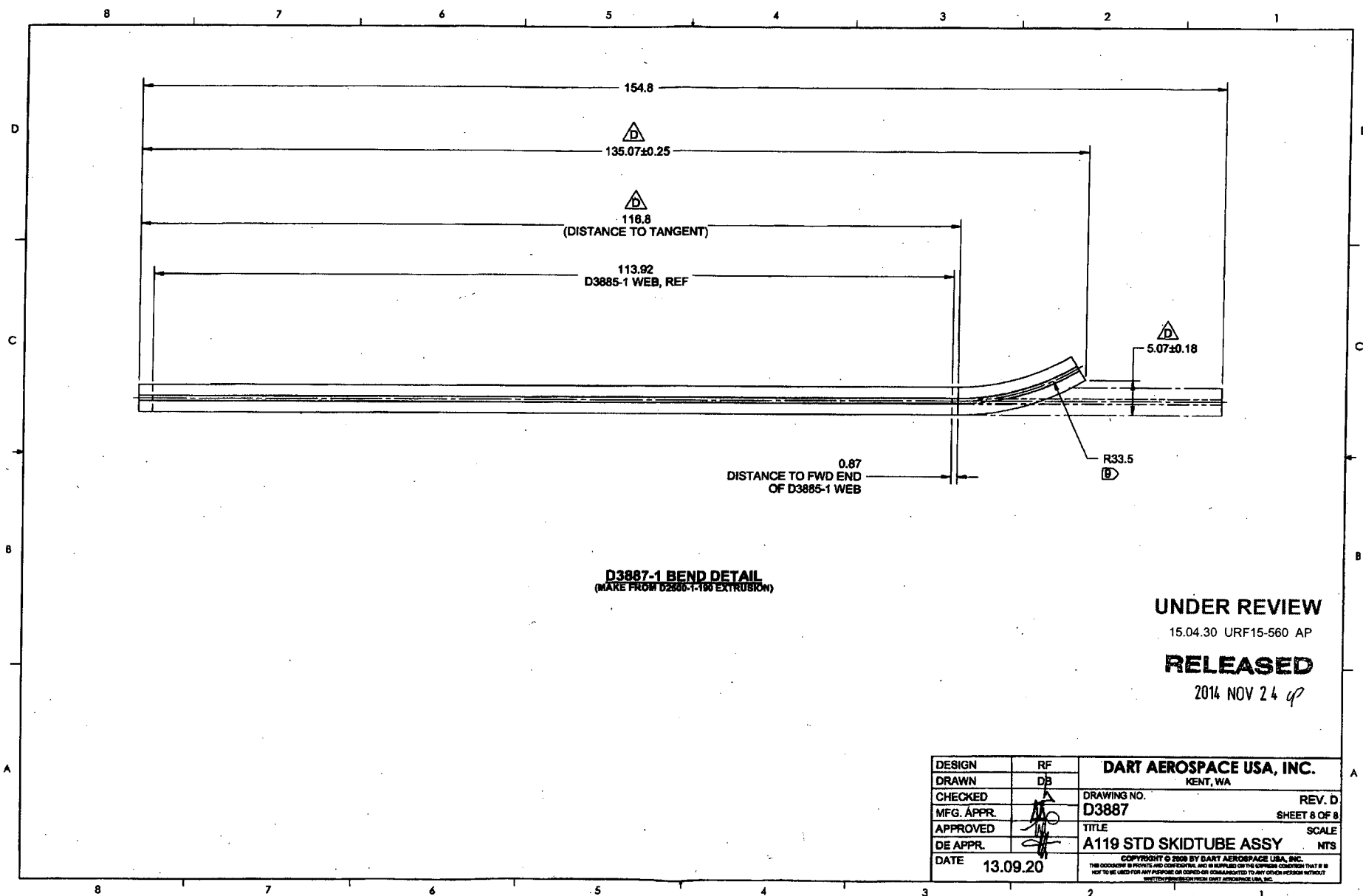
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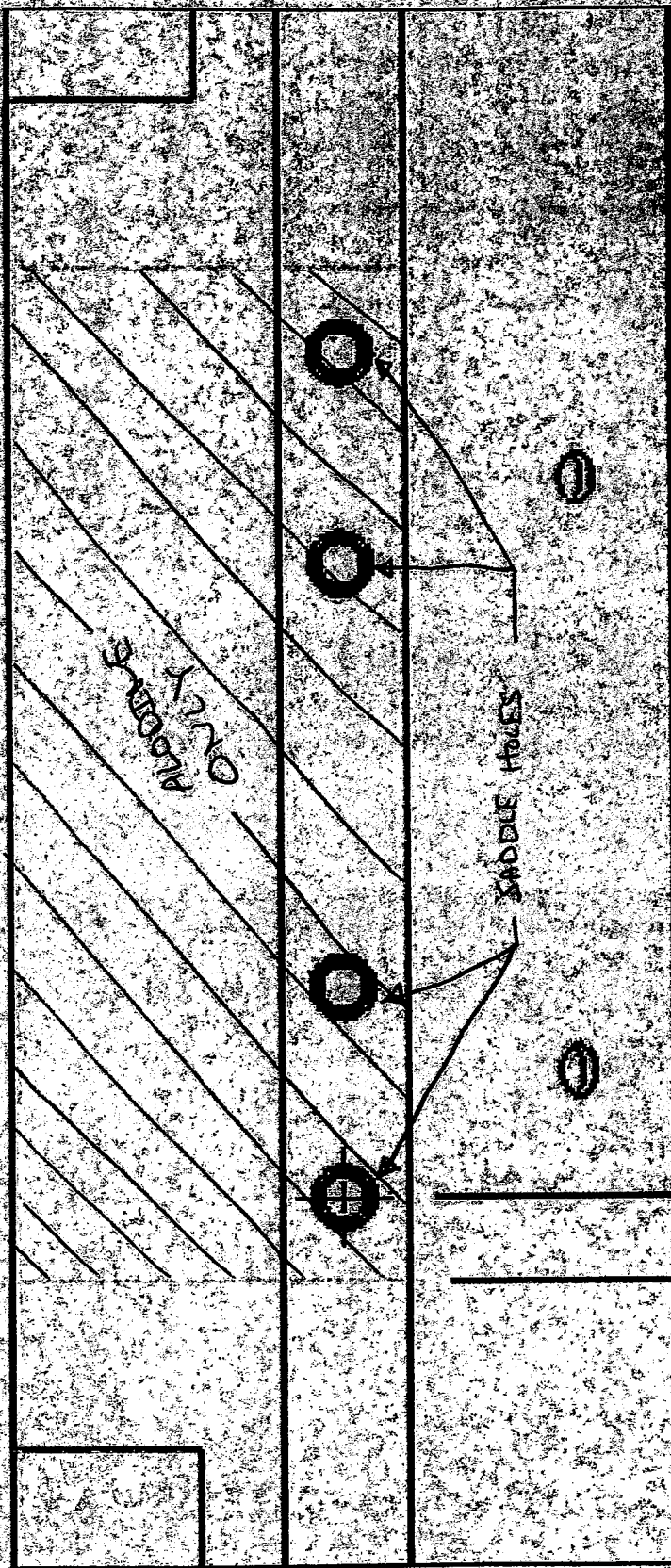
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6.00

15.05



0.50

DQA:

Date: 15/07/09



QA Closed:

Date: 15/07/08

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Work Order: 133781		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. D119-646-041		Rework ☒		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☒		
NCR No. 15-5174		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☒	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date: 15/6/18		Step #: 200		QTY Effective: 1			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition			DAS 12 15/6/18		
No powder cut in saddle locations in accordance with attached dwg. Aludine only.				Acceptable. AU3C-4A / M130551 X 8			Completed By		
							21 15/06/18		
							Lead hand / Supervisor Approval Verification		
							DAS 9 15/07/07		
							QC / QA Coordinator Approval		
							DAS 9 15/07/07		
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☒	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☒	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☒				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

DQA:

Date: 15/07/09

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS			
Part No. _____		Rework ☒	Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	
NCR No. _____		Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	
		Use-as-is ☐	Thermoforming ☐	Finishing ☒	Rec/Store/Packaging ☐	Other ☐	
		Suspected Unapproved ☐	Large Fab ☐	Composite ☐	Supplier ☐		
Date: 15-07-09		Step #: 240		QTY Effective: D		MRB (QSI042) Approval DAS 12 15/6/18 9-89	
Description Work Order Deviation				Disposition			
Plug unused wearplate holes with AN3C4A bolts qty 6.				Acceptable. AN3C-4A b/n <u>X1130551</u>			
				Completed By 15/06/18			
				Lead hand / Supervisor Approval Verification DAS 9 15-07-09 9-89			
				QC / QA Coordinator DAS Approval 9 15-07-09 9-89			
Root Cause		FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☒	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☒	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐						
Misidentified ☐	Past Due ☐	OTHER :					